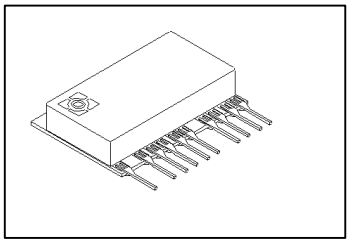
查询OM9402供应商

Omnirel 205 Crawford St. Leominster, MA 01453 (978)534-5776 Fax(978)537-4246, www.omnirel.com

OM9402SP



GATE DRIVER

For Driving IGBT Modules
600V and 1200V, 150A to 600A

FEATURES

- Rugged High Density Industrial Package
- Built in Short Circuit Protection with Fault Output
- High CMRR Optocoupler
- CMOS/TTL Compatible Input Interface

DESCRIPTION

This series of gate drivers are ideally suited for driving the CERMOD™ family of IGBT Power Modules, where small size, high performance and high reliability are required. Designed specifically for high power motor controls, inverters, switching power supplies, choppers and high energy pulse circuits in the aerospace, defense, transportation, industrial and medical equipment industries.

ABSOLUTE MAXIMUM RATINGS (Tc=25°c unless otherwise noted)

Characteristic	Symbol	Min.	Typ.	Max.	UNIT
Operating Temperature	T_A	-40	-	100	°C
Peak Output Current	$I_{O(PEAK)}$	-	-	8	A
Logic Input Voltage	V_{CC}	-	5	5.25	V
Gate Positive Supply Voltage	$+V_G$		15	16	V
Gate Negative Supply Voltage	$-V_G$	-14	-	-0.5	V
Fault Output current	I_{FLT}	-	-	8	mA
Isolation Voltage	Vis			2500	VAC 1min

Omnirel 205 Crawford St. Leominster, MA 01453 (978)534-5776 Fax(978)537-4246, www.omnirel.com

ELECTRICAL CHARACTERISTICS: OM9402SP (Tc= 25°C unless otherwise specified)

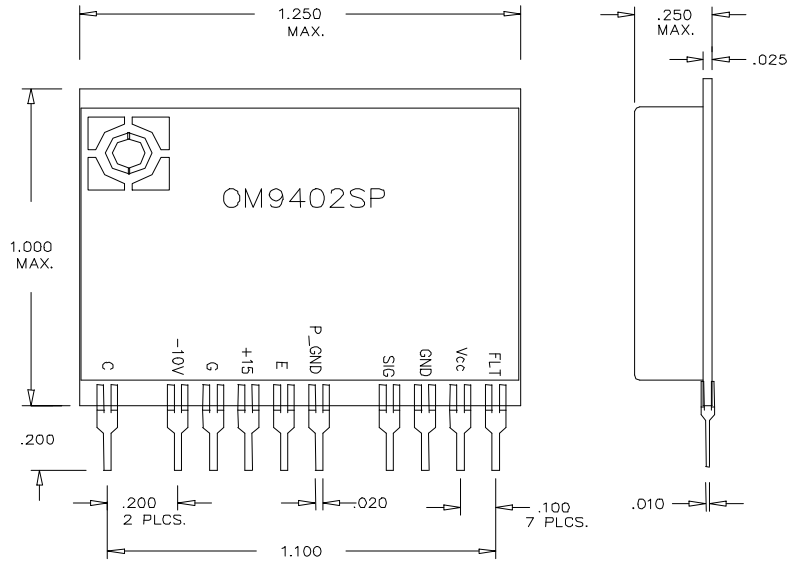
Parameter	Test Condition	Min.	Typ.	Max	Unit
SWITCHING CHARACTERISTICS					
t_{PLH} Signal to High Level Output Propagation Delay Time	R_G=2.5Ω, C_G=2200pF f_{PWM}=10kHz Duty=50%	0.15	0.30	0.55	µS
t_{PHL} Signal to Low Level Output Propagation Delay Time		0.15	0.32	0.55	µS
(t_{PHL}-t_{PLH}) Propagation Delay Difference Between Any Two Parts		-0.4	0.4		µS
tr Rise Time			0.15		µS
tf Fall Time			0.15		µS
I CM I Output Common Mode Transient Immunity	V_{CM}=1500V	15	25		kV/µS
V_C Desat. (Collector) Threshold		6.5	7.0	7.5	V
V_{SIG} Logic Low Signal Voltage				0.8	V
V_{SIG} Logic High Signal Voltage		2.0			V
I_{SIG} Logic Low Current	V_{IN}=0.4V	-0.5	-0.4		mA
V_{UVLO+} UVLO Threshold Positive	V_{OUT}>5V	11.5	13.0	13.6	V
V_{UVLO-} UVLO Threshold Negative	V_{OUT}<5V		11.8	12.4	V
SUPPLY VOLTAGES					
V_{CC} Logic Input Voltage (Recommended)		4.75	5	5.25	V
+V_G Gate Positive Supply Voltage (Recommended)		14.5	15		V
-V_G Gate Negative Supply Voltage(Recommended)		-10		-8	V

R_G- specified in the IGBT module data sheet

Omnirel 205 Crawford St. Leominster, MA 01453 (978)534-5776 Fax(978)537-4246, www.omnirel.com

OM9402SP

MECHANICAL OUTLINE



APPLICATION CIRCUIT